

DEPARTMENT OF TRANSPORTATION

DIVISION OF ENGINEERING SERVICES

Office of Structural Materials

Quality Assurance and Source Inspection



Bay Area Branch
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Contract #: 04-0120F4Cty: SF/ALA Rte: 80 PM: 13.2/13.9File #: 69.15**SOURCE INSPECTION REPORT****Resident Engineer:**Pursell, Gary**Address:** 333 Burma Road**City:** Oakland, CA 94607**Report No:** SIR-002279**Date Inspected:** 01-Dec-2009**Project Name:** SAS Superstructure**OSM Arrival Time:** 700**Prime Contractor:** American Bridge/Fluor Enterprises, a JV**OSM Departure Time:** 1900**Contractor:** Zhenhua Port Machinery Company, Ltd (ZPMC), Changxing Island**Location:** Changxing Dao, Shanghai**Quality Control Contact:** William (Bill) Oak**Quality Control Present:** Yes No**Material transfer:** Yes No N/A**Sampled Items:** Yes No N/A**Stock Transfer:** Yes No N/A**OK to Cut:** Yes No N/A**Rebar Test Witness:** Yes No N/A**Delayed/Cancelled:** Yes No N/A**Other:** Coatings Inspection**Bridge No:** 34-0006**Component:** Tower Lift 1 East, Lift 3 East, OBG 7DE, Sub**Bid Item:** 77, 78, 79**Lot No:** B265**Summary of Items Observed:**

On this date Caltrans Office of Structural Materials (OSM) Quality Assurance (QA) NACE III coating inspector, Mr. James Lumley arrived on site at the Zhenhua Port Machinery Company (ZPMC) facility at Changxing Island in Shanghai, China. The purpose of the coating inspections are to monitor the surface preparation and coating applications for the SAS Bay Bridge project. This QA NACE III coating inspector observed the following:

Office

Attend to project documentation and files. Attempted to access PMIV to upload backlog of reports access was denied.

Tower Lift 1 East

Damage repairs were performed by ZPMC of previously applied Interzinc 22 undercoated surfaces from 0-2M Skins A,B,C,D,E.

Lift 3 East

Internal base metal surfaces of the Bottom Plate Transverse Weld seam were power tool cleaned in preparation of agreed up repairs utilizing organic zinc rich primer. Surface preparation was conducive for application but the ambient conditions were non compliant with the contract documents at the time of inspection.

OBG 7DE

Internal undercoated surfaces were in process of Dry Film Thickness (DFT) verification of "U" Rib Stiffeners, Chevron Beams and Connections, Diaphragms, Upper Corner Units and Floor "T" Stiffeners of the Bottom and Side Plates. Also the FL-3 Beam which was repaired of over blast damages was "Mist" coated with Interfine 979 today.

Sub-Assemblies

Cross Beam Bottom Plate for Cross Beam #6/OBG 6CE beneath the FL-3 beams was "Mist" coated with Interfine

SOURCE INSPECTION REPORT

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979.

OBG 7AW

Internal undercoated surfaces were tested for adhesion and all areas exceeded minimum value specified of 4Mpa.

OBG 7CE

Internal undercoated surfaces were tested for adhesion and all areas exceeded minimum value specified of 4Mpa.

Lift 3 East

Internal and External repairs to the NDT areas and Transverse weld seam were performed of the East Side Plate and Top Plate to "F" Plate edge and Interzinc 52 Organic Zinc undercoat was applied.

Lift 4 West

External surfaces of the Upper Corner Unit areas of NDT damages were cleaned and undercoated with Interzinc 52 in accordance with the agreed method of repair.

Lift 2 East

External surfaces damaged from NDT along the East Side Plate weld seam of OBG 2AE/2BE and Bottom Plate as well as the Top Plate/ "F" Plate edge weld area.

OBG 7DE

Repairs were performed to Internal surfaces previously undercoated with Interzinc 22 due to "Mud Crack" in areas of excessive (DFT). Approximately eight (8) Square Meters of surface area was re-abrasive blasted to base metal and an SSPC SP-10 re-applied. All repaired areas were identified in the ceiling "U" rib stiffeners.

Lift 3 West

Repairs to the Top Plate /"F" Side Plate edge weld NDT repaired areas were performed in accordance with the agreed procedure and Interzinc 52 applied.

Tower Lift 1 East

Internal surfaces were checked for DFT of applied undercoat in areas where the additional stiffeners area to be installed from 0-2M on Skins A, B, C, D, E. ZPMC personnel were observed removing stiffeners from the internal areas previously stock piled yet not blasted and primed to the specified degree of cleaning or undercoating. ZPMC is removing these stiffeners to abrasive blast and undercoat these outside the shaft of the tower. This was suggested by ABF Don Walton weeks prior to installing and stock piling the stiffeners inside the tower shaft.

Note: All inspections were performed jointly with ABF & ZPMC QA/QC representatives and Caltrans QA Lumley when achievable. International Protective Coatings technical service representative were available for inspections and consultation.

Summary of Conversations:

No relevant conversations on this date.

Comments

This report is for the purpose of determining conformance with the contract documents and is not for the purpose of making repair or fit for purpose recommendations. Should you require recommendations concerning repairs or remedial efforts please contact Eric Tsang (858) 699-9549, who represents the Office of Structural Materials for your project.

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| Inspected By: | Lumley,James |
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| Quality Assurance Inspector |
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| Reviewed By: | Peterson,Art |
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| QA Reviewer |
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